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| APPLICATION NO.                | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/564,440                     | 01/12/2006                        | Yoshiaki Obana       | Q77244              | 7441             |
| 23373<br>SUGHRUE MI            | 7590 02/03/200<br>ON, PLLC        | EXAMINER             |                     |                  |
| 2100 PENNSYLVANIA AVENUE, N.W. |                                   |                      | KOSACK, JOSEPH R    |                  |
|                                | SUITE 800<br>WASHINGTON, DC 20037 |                      | ART UNIT            | PAPER NUMBER     |
|                                |                                   |                      | 1626                |                  |
|                                |                                   |                      |                     |                  |
|                                |                                   |                      | MAIL DATE           | DELIVERY MODE    |
|                                |                                   |                      | 02/03/2009          | PAPER            |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)   |  |  |  |
|---|---|--|--|--|--|
|   | 10/564,440  | OBANA ET AL.   |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |
|   | Joseph R. Kosack  | 1626   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status  |   |  |  |  |  |
| 1) ☐ Responsive to communication(s) filed on 19 No.  2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This  3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |
| 4) ☐ Claim(s) 1.3.5-7 and 9-27 is/are pending in the 4a) Of the above claim(s) 14-20 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.3.7.26 and 27 is/are rejected. 7) ☐ Claim(s) 5.6.9-13 and 21-25 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acceptable.   | n from consideration. relection requirement. r. epted or b) objected to by the E  |  |  |  |  |
| Applicant may not request that any objection to the one of the Replacement drawing sheet(s) including the correction  |   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:   | nte  |  |  |  |

### **DETAILED ACTION**

Claims 1, 3, 5-7, and 9-27 are pending in the instant application.

#### **Amendments**

The amendment filed on November 19, 2008 has been acknowledged and has been entered into the application file.

#### Election/Restrictions

The Applicant believes that the Examiner did not address what has been searched and what hasn't been searched and that claims 14-20 should be rejoined and the lack of unity requirement be withdrawn.

The Examiner respectfully disagrees. The Examiner stated in the previous action that the search has been limited to the elected species. The Examiner did mistakenly leave in the provision for the objected claims that they would be allowable if rewritten in independent form. Claims 14-20 do not cover the elected species as they contain an additional element, element (e). Claims 1-6 read on the elected species as they claims are written in "comprising" language and therefore would encompass additional elements that are not presented in the claims.

# Claim Objections

Claims 2, 4-6, 8-13, and 21-25 were previously objected to as being dependent upon a rejected base claim. As the base claims are still rejected, the objection is maintained except for those claims expressly cancelled by the Applicant. The indication that the claims would be allowable if rewritten in independent form was premature.

Application/Control Number: 10/564,440 Page 3

Art Unit: 1626

Claims 26 and 27 were objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend off of another multiple dependent claim.

The Applicant is correct that this has been addressed already, and the objection is withdrawn. Claims 26 and 27 are examined on the merits below.

## Previous Claim Rejections - 35 USC § 112

Claims 1, 3, and 7 were previously rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. The essential steps have been inserted, and the rejection has been withdrawn.

### Previous Claim Rejections - 35 USC § 103

Claims 1, 3, and 7 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Obana et al. (WO 01/24924, corresponds to USPN 6,706,919).

The Applicant has amended the claims to include the limitations of claims 2, 4, and 8 which were not previously rejected and believes that the rejection is no longer valid.

Upon reconsideration, the Examiner must maintain the rejection. The steps do not state if the palladium and heteropolyacid must be loaded at exactly the same time. Therefore, Obana et al. would still render the claims obvious because the second step can be accomplished by loading palladium followed by loading heteropolyacid from how the claims are written.

#### Claim Objections

Art Unit: 1626

Claims 5, 6, 9-13, and 21-25 are objected to as being dependent upon a rejected base claim.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 10/564,440 Page 5

Art Unit: 1626

Claims 1, 3, 7, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obana et al. (WO 01/24924, corresponds to USPN 6,706,919).

Obana et al. teach a process for making a catalyst for the production of acetic acid by loading onto a silica support the following: palladium, zinc, tellurium, and silicotungstic acid. See page 31, Example 5 in the WO document. This corresponds to Example 5, column 18, lines 21-27 of USPN 6,706,919.) Obana et al. also teach using the catalyst to produce acetic acid by reacting ethylene and oxygen in the gas phase. See column 21, Example 10, the whole column.

Obana et al. do not teach where the palladium is loaded two steps instead of one, where the second step includes loading the heteropolyacid.

Since the claims do not specify when the palladium loading steps must occur and in what fashion they must occur, it would be obvious to those of ordinary skill to load one portion of the palladium in one step and the other portion of the palladium in a second step immediately following the first one. Additionally, the claims do not state that in the second step that the palladium and heteropolyacid be loaded at the exact same time. With the scope of the claims, this loading can occur by adding the palladium solution in aliquots to the silica support with each aliquot being a palladium loading step. Performing the palladium and heteropolyacid addition in this fashion would predictably make the prior art catalyst and therefore the claims are *prima facie* obvious over the prior art.

#### Conclusion

Application/Control Number: 10/564,440 Page 6

Art Unit: 1626

Claims 1, 3, 7, 26, and 27 are rejected. Claims 5, 6, 9-13, and 21-25 are objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Kosack whose telephone number is (571)272-5575. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph R Kosack/ Examiner, Art Unit 1626